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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/600,151	06/19/2003	Teuvo Haapalahti	21860-6196	8990

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EXAMINER

KIM, PAUL D

ART UNIT PAPER NUMBER

3729

DATE MAILED: 11/03/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/600,151

Applicant(s)

HAAPALAHTI ET AL.

Examiner

Paul D. Kim

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– The MAILING DATE of this communication appears on the cover sheet with the correspondence address –  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 12 September 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-51 is/are pending in the application.
- 4a) Of the above claim(s) 2,4,12-44,46 and 48-51 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,5-7,9-11,43,45 and 47 is/are rejected.
- 7) ☒ Claim(s) 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 September 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 10/23/03.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_\_

### DETAILED ACTION

This office action is a response to the restriction requirement filed on 9/12/05.

#### ***Response to the Restriction Requirement***

1. Applicant's election of Group I, Species A, Species AB, claims 1, 3, 5-11, 45 and 47, in the reply filed on 9/12/2005 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).
2. Claims 2, 4, 12-44, 46 and 48-51 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 9/12/2005.

#### ***Claim Objections***

3. Claims 5-11, 45 and 47 are objected to because of the following informalities:

Re. Claim 5: The phrase "a conductive body" as recited in line 2 appears to be – the conductive body--.

Re. Claim 6: The phrase "a flange" recited in line 9 appears to be –the flange--.

Re. Claim 11: The phrase "a flange" recited in line 9 appears to be –the flange--.

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claim 1, 3, 5-7, 9-11, 43, 45 and 47 are rejected under 35 U.S.C. 102(e) as being anticipated by Jokilehto et al. (USPAT. 6,501,349).

Jokilehto et al. teach an inner conductor of resonator structure comprising an elongated conductive body (21) with a flange (302) formed on one end as shown in Fig. 4b, wherein the flange is formed integrally with the conductive body in a process in which the end of the conductive body is pressed against a flanging tool (100) such that the conductive body is sized and shaped as shown in Figs. 3-4b (see also col. 4, line 18 to col. 6, line 62).

Re. Claims 3 and 45: The formed flange comprises a curved surface (302) as shown in Fig. 4b.

Re. Claims 5 and 47: The flanging tool (100) is inserted within an open first end (210) of the conductive body (21), wherein the conductive body is pressed over the flanging tool (100) causing the first end of the conductive body to expand, thereby producing a curved flange (302) of a desired size and shape to achieve a desired capacitance as shown in Fig. 4b.

Re. Claim 6: The flanging tool comprises: a guiding tool having a hollow center (800) in which the conductive body can be received; an expanding tool (an upper portion of the tool as shown in Figs. 3 and 4) that is configured to be inserted within the open first end of the conductive body; and a calibration tool (4) that cooperates with the expanding tool such that pressing the conductive body over the expanding tool causes the first end of the conductive body to expand into the calibration tool as shown in Fig. 4b, thereby producing the flange having a desired size defined by a collar (402) of the calibration tool such that the flange achieves a desired capacitance surface area when used in a coaxial resonator, wherein pressing the guiding tool on the flange produces a flange surface having a desired shape for the resonator as shown in Fig. 4b.

Re. Claim 7: The calibration tool further includes a support (a floor) that holds the expanding tool in position such that pressing the guiding tool onto the flange retracts the expanding tool into the calibration tool so that a desired shape of the flanged surface is achieved.

Re. Claim 9: A flange that is formed on a second end (either left or right as shown in Fig. 4b) of the conductive body.

Re. Claim 10: The conductive body has a generally cylindrical shape as shown in Fig. 1.

Re. Claim 11: The flanging tool comprises: a guiding tool with a hollow center (800) into which the conductive body can be placed; an expanding tool (an upper portion of the tool as shown in Figs. 3 and 4) that is configured to be inserted within the open first end of the conductive body; and a calibration tool (4) that cooperates with the

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expanding tool such that pressing the conductive body over the expanding tool causes the first end of the conductive body to expand into the calibration tool, thereby producing the flange of the desired size, and pressing the guiding tool onto the flange flattens the flange (bottom surface of the flange) so that it achieves a desired flatness suitable for the resonator as shown in Fig. 4b.

### ***Allowable Subject Matter***

6. Claim 8 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. The following is a statement of reasons for the indication of allowable subject matter: The prior art of record of Jokilehto et al. teaches all of the limitations as set forth above except the calibration tool comprising an annular disk, supported by a retractable support, wherein the annular disk extends around the outer surface of the calibration tool and extends above an upper surface of the calibration tool so as to form a collar, and the annular disk retracts so that pressing the guiding tool onto the flange flattens the flange. It is not obvious taken alone or in combination of other references fairly to suggest the claimed invention.

### ***Conclusion***

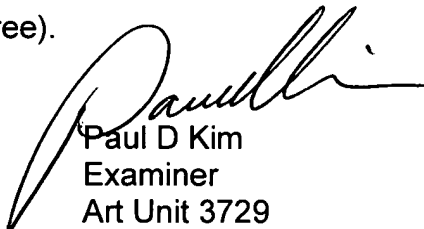
8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul D. Kim whose telephone number is 571-272-4565.

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The examiner can normally be reached on Monday-Friday between 7:00 AM to 3:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter Vo can be reached on 571-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Paul D Kim  
Examiner  
Art Unit 3729